

Name: _____

Date: _____

Pd: _____

Systems Word Problems HW #1

1. Kai is visiting a farm before Halloween. She sees eighty-seven animals; some are turkeys and some are cows. She counts a total of two-hundred and fifty scary Halloween boots for all of the animals. Assuming that all turkeys need two boots and all cows need four boots, how many turkeys are on the farm? How many cows?

a. Define variables that make sense for the situation.

b. Write AND SOLVE a system of linear equations. Show all work.

c. Check your answers via SUBSTITUTION and REALITY.

d. Write your final answers with LABELS.

2. Chloe is an engineer, working with copper alloy. She has one hundred kilograms of 25% copper alloy and one hundred kilograms of 50% copper alloy. How many kilograms of each alloy does she need to make 40 kilograms of 45% copper alloy?

a. Define variables that make sense for the situation.

b. Write AND SOLVE a system of linear equations. Show all work.

c. Check your answers via SUBSTITUTION and REALITY.

d. Write your final answers with LABELS.

